# CIMIDOT



West Michigan Transportation Operations Center Annual Report Oct. 1, 2017 - Sept. 30, 2018

The West Michigan Transportation Operations Center (WMTOC) focuses on the Michigan Department of Transportation's (MDOT) goals of improving safety, mobility, and economics through incident management, crash reduction, and traveler information activities.

This report includes a snapshot of our performance in the areas of Traveler Information, Incident Management, Event Management, and Intelligent Transportation Systems Maintenance. We are committed to providing the Grand Region with the highest level of transportation management, disseminating reliable traveler information to the public, and supporting regional and statewide partners and goals.

Additional detailed information is available in the monthly reports on our website located at www.Michigan.gov/WMTOC or by contacting Suzette Peplinski, P.E., Traffic Safety and Operations engineer, MDOT - West Michigan TOC by calling 616-451-8448 or e-mailing PeplinskiS@Michigan.gov.

### Traveler Information

#### Disseminating Essential Traveler Information for West Michigan Motorists.

- The WMTOC has maintained a content accuracy level of 99.2 percent for messages sent to the public.
- Control room operators have provided traveler information 27.8 percent faster than targeted goal.

#### Mi Drive

The Mi Drive website (www.Michigan.gov/Drive) provides motorists with a real-time interactive map with traffic camera images, average vehicle speeds, construction activity, dynamic message sign (DMS) messages, and the location of major incidents.

WMTOC operators share crash/incidents and construction notifications via Mi Drive. To receive incident and/or construction notifications via e-mail or text, sign

up for this service on the Mi Drive site. Scroll to the bottom of the page and click the link for "Receive Traffic Alerts."

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WMTOC operators assist the MDOT Grand Region communications representative in providing up-to-date information to the general public through social media, such as Twitter.

@MDOT West Twitter (www.twitter.com/MDOT West) followers increased from 13,520 to 14,949 this year, about a 10 percent increase.

#### **Dynamic Message Signs**

Within the Grand Region, MDOT has 33 DMS used to provide information for the traveling public. These signs display messages regarding incidents, weather, safety,

▲ @ ! B P

Crash Incident

Notification

Subscribers

Construction

Notification

Subscribers

construction, special events, congestion, and AMBER Alerts. Most of the DMS continuously display travel times to one or two destinations, which aids motorists with navigating the freeway network. The WMTOC is focused on providing reliable and accurate information for the Grand Region.

midrive

#### **DMS Messages by Type**









SPECIALEVENT WEATHER



2017

23,462

23,129

2018

26.825

26,616

1278

2785

461



## Incident Management

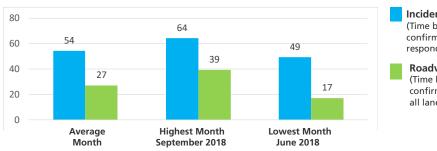
Supporting Coordination of Incident Response and Clearance Efforts to Increase Safety and Reduce Congestion

- WMTOC supported the most incidents per month in June 2018.
- Clearance time has improved by 6.8 percent compared to fiscal year (FY) 2017.

Incident clearance time and roadway clearance time are key metrics that MDOT reports annually to the Federal Highway Administration on all incidents that block at least one lane of the trunkline.

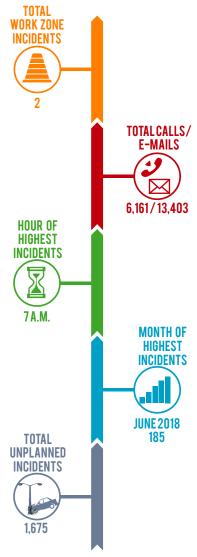
The chart below shows the average incident and roadway clearance time. September 2018 and June 2018 had the highest and lowest number of incident clearance times, respectively. Overall, we have seen a reduction in our roadway clearance times of 4.2 percent when compared to last year.

#### **Incident/Roadway Average Clearance Times**



Incident Clearance Time
(Time between incident confirmation and when all first responders have left the scene.)

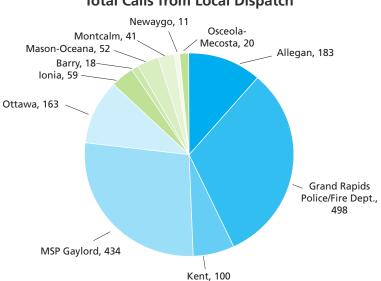
Roadway Clearance Time (Time between incident confirmation to the time when all lanes are available to traffic.)



#### **Incident Response**

In order to manage incidents and reduce congestion, WMTOC operators actively monitor freeways and state trucklines within the 13 counties of MDOT's Grand Region. Operators maintain contact with local county dispatch centers, MDOT, Michigan State

**Total Calls from Local Dispatch** 



Police (MSP), local agency employees, and first responders, while also monitoring radio scanners and other tools

that provide traffic incident information within the Grand Region.

Effective incident management requires the support of many stakeholders actively working together. MDOT works closely with MSP, local police and fire departments, and county stakeholders to provide timely support to the traveling public. The adjacent graph provides a snapshot of the level of coordination and communication between the WMTOC and local dispatch. We value the relationships with all Grand Region stakeholders.

#### WMTOC on the Road

The WMTOC was active in reaching out to regional stakeholders to improve communications and collaboration. We visited or had visits from 11 of the 12 dispatch centers in our region. Goals for this outreach were to inform our dispatch partners of the resources and capabilities MDOT has available, offer MiTIME training, and promote a data-sharing solution that will benefit both MDOT and the local agencies for managing traffic incidents. This has led to two of the agencies implementing Active 911 as a notification tool with more coming on board soon. Efforts to maintain this open communication with dispatch centers will continue in the coming year.

## **Event Management**

#### Informing Motorists of Special Events and Work Zone Activities

• WMTOC operators posted more than 1,700 special event and construction messages on DMS.

#### FY 2018 Spotlights

#### **100th Street Bridge Hits**

This year proved to be a bad one for the 100th Street bridge over US-131. The bridge was struck 12 times by loads that were too tall to clear. This resulted in damage to the structure that required significant repairs. The WMTOC was actively involved in managing these bridge-hit events by notifying responders and MDOT bridge staff. The WMTOC also posted closure messages on DMS and monitored traffic cameras when notified by dispatch of



over-height loads. The overpass bridge was eventually repaired and the pavement below was lowered by several inches to allow for more clearance.

**I-96 Construction** 

#### **Project**

I-96 was closed from US-131 to Plainfield Avenue for resurfacing and bridge repairs. This project included repairs to the bridge over the Grand River as well as five street overpasses. The freeway was completely shut down one direction at a time.

The eastbound lanes were closed first, detouring traffic through downtown Grand Rapids via I-196 and US-131. Backups were significant for peak times through the city. Messages were displayed on DMS and portable changeable message signs in advance of the project and while work was being performed. Since westbound lanes remained open, the afternoon peak did not see as much congestion during this phase.

After completion and opening of the eastbound lanes in July, the westbound side was closed. Having the eastbound lanes open improved the morning peak since travelers were no longer diverted through the downtown area. Although this project did not finish when expected, both sides were completed and open by September.

## ITS Management

#### Maintain an Intelligent Transportation Systems (ITS) Network Built for Growth

#### **Grand Region ITS Devices**

Grand Region ITS devices are used to support incidents, construction, and special events. Messages are posted to provide motorists with reliable travel information. The Grand Region is adding new devices throughout the region along freeways and arterials each year. MDOT has developed standard operating procedures for operating the devices to be used by the WMTOC to assist motorists and first responders.

In 2018, MDOT added:

- Two traffic cameras
- Two DMS

• Two vehicle detection sensors

In 2019, MDOT will add:

- Ten traffic cameras
- Three DMS
- Five vehicle detectors
- Three environmental sensor stations

